

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Final

**AIR QUALITY PERMIT
Issued under 401 KAR 52:030**

Permittee Name: Estron Chemical, Inc.
Mailing Address: P.O. Box 127, Calvert City, KY 42029

Source Name: Estron Chemical, Inc.
Mailing Address: P.O. Box 127
Calvert City, KY 42029

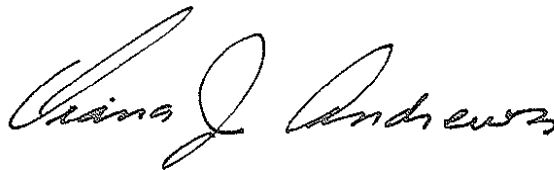
Source Location: 409 North Main Street, Calvert City, KY 42029

Permit Number: F-05-040
Source A. I. #: 2934
Activity #: APE20040001
Review Type: Conditional Major/Synthetic Minor
Source ID #: 21-157-00015

Regional Office: Paducah Regional Office
130 Eagle Nest Drive
Paducah, KY 42003-9435
(270) 898-8468

County: Marshall

Application
Complete Date: July 11, 2002
Issuance Date: October 31, 2006
Revision Date:
Expiration Date: October 31, 2011



**John S. Lyons, Director
Division for Air Quality**

TABLE OF CONTENTS

SECTION	ISSUANCE	PAGE
A. PERMIT AUTHORIZATION	Initial	1
B. EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS	Initial	2
C. INSIGNIFICANT ACTIVITIES	Initial	18
D. SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS	Initial	19
E. SOURCE CONTROL EQUIPMENT REQUIREMENTS	Initial	21
F. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS	Initial	22
G. GENERAL PROVISIONS	Initial	25
H. ALTERNATE OPERATING SCENARIOS	Initial	31
I. COMPLIANCE SCHEDULE	Initial	31

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:030, Federally-enforceable permits for non-major sources.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Units BA, BB, and BC - Indirect Heat Exchangers (Boilers and Hot Oil Heaters)

BA - Boiler #1

Description: Indirect Heat Exchanger – Cleaver Brooks, Model CR100-300

Fuel: Natural gas

Construction Date: 1986

Rated Capacity: 12.5 mmBtu/hr

Control Equipment: None

BB - Hot Oil Heater

Description: Indirect Heat Exchanger – MOOR Heat, Model HTL-10

Fuel: Fuel Oils No. 1 and No. 2

Construction Date: 1973

Rated Capacity: 1.44 mmBtu/hr

Control Equipment: None

BC - Boiler #2

Description: Indirect Heat Exchanger – Cleaver Brooks, Model CB11100-50

Fuel: Fuel Oils No. 1 and No. 2

Construction Date: 1973

Rated Capacity: 2.09 mmBtu/hr

Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 59:015, *New Indirect Heat Exchangers* - applies to the particulate matter and sulfur dioxide emissions for each indirect heat exchanger commenced on or after April 9, 1972

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:015, Section 4(1)(a), emissions of particulate matter (PM) from each of BA, BB and BC from the combustion of natural gas or fuel oil shall not exceed 0.50 lb/mmBtu actual heat input, based on a three-hour average.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b) Pursuant to 401 KAR 59:015, Section 4(2), emissions from each of BA, BB and BC shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity based on a six minute average shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire-box or blowing soot and except for emissions during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c) Pursuant to 401 KAR 59:015, Section 5(1)(a), emissions of sulfur dioxide from each of BA, BB and BC from the combustion of natural gas or fuel oil shall not exceed 2.47 lb/mmBtu actual heat input, based on a 24-hour average.
- d) See **Section D.3, Source Emission Limitations** for source-wide emission limitations.

Compliance Demonstration Method:

- a) Compliance with the particulate emission limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 7.6 lbs PM/million standard cubic feet (mmscf) and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the particulate emission limit is demonstrated when burning fuel oil, based on an AP-42 emission factor of 2 lbs PM/1000 gallons and a fuel heat capacity of 140,000 Btu per gallon.
- b) Compliance with the opacity limit is demonstrated when burning natural gas. Refer to **Specific Monitoring Requirements 4.b** for compliance with the opacity limitation when burning No. 1 or No. 2 fuel oil. Refer to **Specific Recordkeeping Requirements 5.c** for compliance with the opacity limitation during periods of boiler startup, shutdown or malfunction.
- c) Compliance with the sulfur dioxide limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 0.6 lbs SO₂/mmscf and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the sulfur dioxide limit is demonstrated when burning fuel oil if the lbs of SO₂ per mmBtu is less than the limit, to be determined by the permittee based on an AP-42 emission factor of 142 x %S (lb/kgal), the fuel oil sulfur content S (%), and a fuel heat capacity of 140,000 Btu per gallon. Refer to **Specific Monitoring Requirements 4.a** for determination of fuel oil sulfur content.

3. Testing Requirements:

Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

The permittee shall monitor and maintain records of the following information:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- a) The sulfur content of fuel oil burned in EP-BB and EP-BC and the fuel heat content. The sulfur content may be determined by fuel sampling and analysis or by fuel supplier certification at the time of fuel purchase.
- b) The type and monthly amount of fuel fired in each unit (cubic feet/month or gallons/per month for natural gas and oil, respectively), and the monthly hours of operation of each boiler.
- c) If fuel oil is combusted at EP-BB or EP-BC, the permittee shall perform a qualitative visible observation of the opacity of emissions once per week from the respective emission unit stack upon stabilization of the emission unit after startup and maintain a log of the observation. If visible emissions from a stack are seen, then the opacity shall be determined by EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

5. Specific Recordkeeping Requirements:

- a) Records shall be maintained of the visual observations of stack emissions, any EPA Reference Method 9 test performed, and any necessary repairs made as a result of not meeting an emission limitation.
- b) The permittee shall maintain records in accordance with 4. **Specific Monitoring Requirements**.
- c) During periods of each boiler startup, shutdown or malfunction, a daily (calendar day) log of the following information shall be kept: [Permit No. S-97-086, issued December 15, 2000]
 - i. Whether any air emissions were visible from the boiler stack.
 - ii. Whether the visible emission were normal for the process.
 - iii. The color of the emissions and whether the emissions were light or heavy.
 - iv. The cause of the abnormal visible emissions.
 - v. Any corrective actions taken.

6. Specific Reporting Requirements:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit BD - Indirect Heat Exchanger (Boiler)****BD - Boiler #3**

Description: Indirect Heat Exchangers – Superior Steam Boiler

Primary Fuel: Natural gas

Backup Fuel: Fuel Oil No. 2

Construction Date: 2001

Rated Capacity: 21.0 mmBtu/hr

Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 60:005, Sections 2 and 3(1)(e) - incorporates by reference *40 CFR Part 60.40c to 60.48c (Subpart Dc)*, “Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units”. This rule applies to Boiler #3 (EP BD) which commenced after June 9, 1989 and has heat input rating of 29 MW (100 mmBtu/hr) or less, and greater than 2.9 MW (10 mmBtu/hr). Pursuant to 40 CFR 60.46c(e), the monitoring requirements of 40 CFR 60.46c(a) and (d) are not applicable to this unit which is subject to 40 CFR 60.42c(h)(1) since compliance with the SO₂ standard shall be demonstrated based on fuel supplier certifications as described.

401 KAR 59:015, *New Indirect Heat Exchangers* - applies to the particulate matter and sulfur dioxide emissions for each indirect heat exchanger commenced on or after April 9, 1972.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Pursuant to 401 KAR 59:015, Section 4(1)(c), emissions of particulate matter (PM) from the combustion of natural gas or fuel oil shall not exceed 0.41 pounds/mmBtu of actual heat input, based on a three-hour average.
- b) Pursuant to 401 KAR 59:015, Section 4(2), emissions shall not exceed 20% opacity based on a six minute average, except that a maximum of 40% opacity based on a six minute average, shall be permissible for not more than six consecutive minutes in any 60 consecutive minutes during cleaning the fire-box or blowing soot and except for emissions during building a new fire for the period required to bring the boiler up to operating conditions provided the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations.
- c) Pursuant to 401 KAR 59:015, Section 5(1)(c), sulfur dioxide (SO₂) emissions from the combustion of natural gas or fuel oil shall not exceed 1.79 pounds/mmBtu of actual heat input, based on a 24-hour average.
- d) When combusting oil, the permittee shall not cause to be discharged into the atmosphere from Boiler #3 any gases that contain SO₂ emissions in excess of five tenths (0.5) pounds per million Btu heat input; or, as an alternative, the sulfur content

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

of the combusted fuel oil shall not exceed five-tenths percent (0.5%) by weight. The SO₂ and fuel oil sulfur content limit apply at all times, including periods of startup, shutdown, and malfunction. [40 CFR 60.42c(d) and 60.42c(i)]

- e) See **Section D.3, Source Emission Limitations** for source-wide emission limitations.

Compliance Demonstration Method:

- a) Compliance with the particulate emission limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 7.6 lbs PM/million standard cubic feet (mmscf) and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the particulate emission limit is demonstrated when burning fuel oil, based on an AP-42 emission factor of 2 lbs PM/1000 gallons and a fuel heat capacity of 140,000 Btu per gallon.
- b) Compliance with the opacity limit is demonstrated when burning natural gas. Refer to **Specific Monitoring Requirements 4.b** for compliance with the opacity limitation when burning No. 2 fuel oil.
- c) Compliance with the sulfur dioxide limit is demonstrated when burning natural gas, based on an AP-42 emission factor of 0.6 lbs SO₂/mmscf and a fuel heat capacity of 1020 mmBtu/mmscf. Compliance with the sulfur dioxide limit is demonstrated when burning fuel oil if the lbs of SO₂ per mmBtu is less than the limit, to be determined by the permittee based on an AP-42 emission factor of 142 x %S (lb/kgal), the fuel oil sulfur content S (%), and a fuel heat capacity of 140,000 Btu per gallon. Refer to **Specific Monitoring Requirements 4.a** and **Specific Recordkeeping Requirements 5.c** for determination of fuel oil sulfur content.
- d) Compliance with the emission limits or fuel oil sulfur limits under **Emission Limitations 2.d** may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.28c(f)(1). [40 CFR 60.42c(h)]. See **Specific Recordkeeping Requirements 5.c**.

3. Testing Requirements:

- a) The performance test shall consist of the certification from the fuel supplier, as described under 40 CFR 60.48c(f)(2). [40 CFR 60.44c(h)]. See **Specific Recordkeeping Requirements 5.c**.
- b) Pursuant to 401 KAR 59:005 Section 2(2) and 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. Specific Monitoring Requirements:

- a) If No. 2 fuel oil is burned, the permittee shall perform a qualitative visible observation of the opacity of emissions once per week from the stack upon stabilization of the emission unit after startup and maintain a log of the observation. If visible emissions from a stack are seen, then the opacity shall be determined by

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

EPA Reference Method 9 and an inspection shall be initiated for any necessary repairs.

5. Specific Recordkeeping Requirements:

- a) Records shall be maintained of the visual observations of stack emissions, any EPA Reference Method 9 test performed, and any necessary repairs made as a result of not meeting an emission limitation.
- b) The permittee shall maintain records of monthly fuel usage and hours of boiler operation.
- c) To document compliance with **Emission Limitations 2.d**, the permittee shall maintain records of the fuel supplier certification for all fuel oil burned. Certification shall include the following information for distillate oil: [40 CFR 60.48c(f)(1)]
 - i. The name of the oil supplier; and
 - ii. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c.
- d) The permittee shall record and maintain records of the amounts of each fuel combusted during each day. [40 CFR 60.48c(g)]
- e) All records shall be maintained in accordance with **Section F.2.**

6. Specific Reporting Requirements:

- a) The permittee subject to the sulfur dioxide emission limits, fuel oil sulfur limits, or percent reduction requirements under 40 CFR 60.42c shall keep records and submit reports as required by 40 CFR 60.48c(d), including the following information, as applicable. [40 CFR 60.48c(d) and (e)]
 - i. Calendar dates covered in the reporting period.
 - ii. If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under 40 CFR 60.48c(f)(1), (2), or (3), as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the permittee of the affected facility that records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.
 - iii. The reporting period is each six-month period. All reports shall be submitted to the Division and shall be postmarked by the 30th day following the end of the reporting period.
- b) See **Section F.5.**

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units R2, R4, R6, R8, R11, R12, R16, and FUG - Facility Reactor Systems

Emission Unit	Description	Reactor Installation Date	Reactor Capacity (Gallons)
R2	Reactor System # 2*: Batch production of polymers utilizing Reactor #2, Feed tank (pot 5), condenser, and two condensate receivers. No emission controls.	1989	1,900
R4	Reactor System # 4*: Batch production of polymers utilizing Reactor # 4, Feed tank (pot 5), condenser, and condensate receiver. No emission controls.	1993	600
R6	Reactor System # 6*: Batch production of polymers utilizing Reactor # 6, Feed tank (pot 5), condenser, and two condensate receivers. No emission controls.	1973	750
R8	Reactor System # 8*: Batch production of polymers utilizing Reactor # 8, two condensers, and condensate receiver. No emission controls.	1999	4,500
R11	Reactor System # 11*: Batch production of polymers utilizing Reactor # 11, two Feed tanks (A and B), condenser, two condensate receivers, and product receiver (pot 13). No emission controls.	1973	2,250
R12	Reactor System # 12*: Batch production of polymers utilizing Reactor # 12, two Feed tanks (A, pot 10), two condensers, condensate receiver, thin film evaporator, and chill roll. No emission controls.	2005	4,000
R16	Reactor System # 16*: Batch production of polymers utilizing Reactor # 16, two Feed tanks, condenser, condensate receiver, product receiver (pot 17), and receiver (tank 142). No emission controls.	1973	1,000
FUG	Fugitive emissions from associated piping for batch reactor systems consisting of the following: Valves – 238 (count) Pump Seals – 9 (count) Connectors (Flanges) – 373 (count) Relief Valves – 7 (count)	1973-2005	--

*Some system equipment may be common with other reactor systems.

APPLICABLE REGULATIONS:

401 KAR 63:020 - *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances. See **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

NON-APPLICABLE REGULATIONS:

40 CFR 60, Subpart VV, *Standards of Performance for Equipment Leaks of VOC in Synthetic*

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Organic Manufacturing Industry (incorporated by reference at 401 KAR 60:005) does not apply because the facility is not a synthetic organic chemicals manufacturing industry as defined (i.e., does not produce as a product, intermediate, or byproduct, any of the chemicals listed in 40 CFR 60.489). [40 CFR 60.481]

40 CFR 60, Subpart DDD, *Standards of Performance for Volatile Organic Compound Emissions from the Polymer Manufacturing Industry* (incorporated by reference at 401 KAR 60:005) does not apply because the facility does not manufacture polypropylene, polyethylene, polystyrene, or poly (ethylene terephthalate). [40 CFR 60.560(a)]

40 CFR 60, Subpart RRR, *Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry Reactor Processes* (incorporated by reference at 401 KAR 60:005) does not apply because each reactor process is designed and operated as a batch operation. [40 CFR 60.700(c)(1)]

1. **Operating Limitations:**

None

2. **Emission Limitations:**

See **Section D.3, Source Emission Limitations** for hazardous air pollutant (HAP), particulate matter less than 10 microns (PM₁₀) and volatile organic compound (VOC) emission limitations.

Compliance Demonstration Method:

See **Section D.3, Source Emission Limitations, *Compliance Demonstration Method***.

3. **Testing Requirements:**

Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**

The permittee shall monitor and record the information specified at **5.b Specific Recordkeeping Requirements**.

5. **Specific Recordkeeping Requirements:**

a) Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide recordkeeping requirements.

b) Pursuant to 401 KAR 52:030, Section 10, the permittee shall keep and maintain records for each of the polymer manufacturing processes listed above (Emission Unit R2, R4, R6, R8, R11, R12, R16). These records shall be summarized and totaled at the end of each quarter (March 31, June 30, September 30, and December 31) and again at the end of each calendar year. The permittee shall keep records of the following information for each of the polymer manufacturing processes listed:

- i. A list correlating each polymer with its chemical name and/or composition. Each polymer produced shall be uniquely identified and correlated with its corresponding chemical name and/or composition;

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. Information on each polymer manufacturing process (i.e., unit) and equipment including the following: equipment type, description, make and model, maximum design process rate or throughput, and type and description of control devices used (if any);
- iii. A quarterly log of operating hours for each polymer manufacturing process (i.e., each unit), each raw material used in the manufacture of each polymer and its amount, each polymer produced, and its production rate (pounds or tons per quarter);
- iv. Purchase orders, invoices, and other documents to support the quarterly log; and
- v. Any additional information requested in writing by the Division.

6. Specific Reporting Requirements:

Refer to **Section F.2.**

7. Specific Control Equipment Operating Conditions:

- a) The permittee shall install secondary condensers on process stacks that vent to the atmosphere from reactors used for processes involving volatile organic compounds. At least three (3) condensers shall be installed. The condensers shall be designed to reduce further the emission of contaminants into the air. The permittee shall maintain records documenting the reactors on which the required condensers were installed. [Permit No. S-97-086, Section C, Condition G.1, Agreed Order]
- b) The permittee shall install instrumentation on Reactor System #8 and one other reactor system (any one) which is designed for the processing of compounds containing volatile organic materials. The permittee shall maintain records documenting the reactor(s) on which the required instrumentation is installed. The instrumentation shall be designed to allow for better process control, to reduce or to eliminate batches outside of specifications. At a minimum, the instrumentation shall include: [Permit No. S-97-086, Section C, Condition G.2, Agreed Order]
 - i. A infrared pyrometer, or equivalent, for temperature control. The signal from this instrument will automatically control the energy supply to the reactor;
 - ii. A mass flow meter to automatically measure and control the flow of reactants being fed into the reactor with automatic safety shutdown devices;
 - iii. Additional temperature measurement points installed to measure reactor temperature, condenser inlet and outlet temperatures;
 - iv. Pressure (vacuum) indication and control devices; and
 - v. Other control and measuring systems, as needed.

8. Alternate Operating Scenarios:

None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Units DR, TB, TC, TK, TL, TM, TN, TO, TP, and TQ - Tank Farm

DR Monomer and Solvent Drumming – Loading from tanks to drums

Construction Date: N/A

Capacity: N/A

Control Equipment: None

TB (Tank 104) Fixed roof volatile organic liquid storage vessel

Construction Date: 1992

Storage Capacity: 12,500 gallons

Control Equipment: None

TC (Tank 118) Fixed roof volatile organic liquid storage vessel

Construction Date: 1992

Storage Capacity: 12,500 gallons

Control Equipment: Vapor equalization back to tank wagon

TL (Tank 145) Fixed roof volatile organic liquid storage vessel

Construction Date: 2003

Storage Capacity: 3,000 gallons

Control Equipment: Vapor equalization back to tank wagon

TM (Tank 146) Fixed roof volatile organic liquid storage vessel

Construction Date: 2003

Storage Capacity: 3,000 gallons

Control Equipment: Vapor equalization back to tank wagon

TN (Tank 147) Fixed roof volatile organic liquid storage vessel

Construction Date: 2003

Storage Capacity: 8,000 gallons

Control Equipment: Vapor equalization back to tank wagon

TO (Tank 148) Fixed roof volatile organic liquid storage vessel

Construction Date: 2003

Storage Capacity: 8,000 gallons

Control Equipment: Vapor equalization back to tank wagon

TP (Tank 151) Vertical fixed roof volatile organic liquid storage vessel

Construction Date: 2006

Storage Capacity: 10,000 gallons

Control Equipment: Vapor equalization back to tank wagon

TQ (Tank 152) Vertical fixed roof volatile organic liquid storage vessel

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Construction Date: 2006

Storage Capacity: 10,000 gallons

Control Equipment: Vapor equalization back to tank wagon

APPLICABLE REGULATIONS:

401 KAR 63:020 - *Potentially Hazardous Matter or Toxic Substances*, applies to sources which emit or may emit potentially hazardous or toxic substances. See **Section D - Source Emission Limitations and Testing Requirements** for source wide limitations.

NON-APPLICABLE REGULATIONS:

40 CFR 60, Subpart VV, *Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Manufacturing Industry* (incorporated by reference at 401 KAR 60:005) does not apply because the facility is not a synthetic organic chemicals manufacturing industry as defined (i.e., does not produce as a product, intermediate, or byproduct, any of the chemicals listed in 40 CFR 60.489). [40 CFR 60.481]

40 CFR 60, Subpart Kb (40 CFR 60.112b), *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984* does not apply to any of the storage tanks because the storage capacity of each tank is less than the rule applicability threshold of 75 m³ (19,812 gallons).

1. **Operating Limitations:**

None

2. **Emission Limitations:**

See **Section D.3, Source Emission Limitations** for hazardous air pollutant (HAP), particulate matter less than 10 microns (PM₁₀) and volatile organic compound (VOC) emission limitations.

Compliance Demonstration Method:

See **Section D.3, Source Emission Limitations, *Compliance Demonstration Method*.**

3. **Testing Requirements:**

Pursuant to 401 KAR 50:045, Section 1, performance testing using the Reference Methods specified in 401 KAR 50:015 shall be conducted as required by the Division.

4. **Specific Monitoring Requirements:**

None

5. **Specific Recordkeeping Requirements:**

a. Refer to **Section D - Source Emission Limitations and Testing Requirements** for source wide recordkeeping requirements.

b. Pursuant to 401 KAR 52:030, Section 10, for each tank the permittee shall maintain a quarterly log identifying the liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. These records

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

shall be summarized and totaled at the end of each quarter (March 31, June 30, September 30, and December 31) and again at the end of each calendar year. Information on the tank design and specifications including control equipment (if any), shall also be maintained. Such records shall be provided to the Division upon request.

6. **Specific Reporting Requirements:**
Refer to **Section F.2.**
7. **Specific Control Equipment Operating Conditions:**
None
8. **Alternate Operating Scenarios:**
None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Units BM, CG1, FB, LB, M1, MM1, MM2, MP, and SSE - Powder Processing**

BM	Boxing Machine
<u>Description:</u>	Construction Date: 2001 Capacity: 6,000 lb/hr of polymer Control Equipment: Dust collector BH5 Control Efficiency: 95%
CG1	Coarse Grinder # 1 – Cumberland grinder (grinder 2)
<u>Description:</u>	Construction Date: 1985 Capacity: 750 lb/hr Control Equipment: Dust collector BH3 Control Efficiency: 95%
FB	Sandvik flaker belt (grinder 5) Applicator end of the flaker belt Discharge end of the flaker belt
<u>Description:</u>	Construction Date: 1998 Capacity: 2,200 lb/hr flaked polymer Control Equipment: Dust collector BH6 and Dust collector BH2 Control Efficiency: 95% each
LB	Littleford blender (blender 2) Littleford Blender Packaging
<u>Description:</u>	Construction Date: 1985 Capacity: 750 lb/hr Control Equipment: Bag filters – vented indoors with negligible emissions; Dust collector BH3 Control Efficiency: 95%
M1	Mill – Custom fabrication (grinder 4)
<u>Description:</u>	Construction Date: 1998 Capacity: 1,500 lb/hr milled polymer Control Equipment: Dust collector BH2 Control Efficiency: 95%
MM1	Marion Mixer #1 Marion Mixer # 1 (blender 1) Packaging
<u>Description:</u>	Construction Date: 1992 Capacity: 1,250 lb/hr blended material (polymers, monomers) Control Equipment: Bag filters – vented indoors with negligible emissions and Dust collector BH1 Control Efficiency: 95%
MM2	Marion mixer (blender 3)

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- Marion Mixer # 2 - vent 1
Marion Mixer #2 - vent 2
Description: Construction Date: 1998
Capacity: 1,750 lb/hr blended material (polymers, monomers)
Control Equipment: Dust collector BH4 and Dust collector BH5
Control Efficiency: 95%
- MP** Micropulverizer (grinder 1)
Micropulverizer
Packaging
Description: Construction Date: 1990
Capacity: 750 lb/hr pulverized polymers
Control Equipment: Bag filter – vented indoors with negligible emissions; Dust collector BH3
Control Efficiency: 95%
- SSE** Single Screw Extruder – Single screw extruder and drum flaker with chill rolls (masterbatch)
Description: Construction Date: 2003
Capacity: 1,000 lb/hr polymers
Control Equipment: None

APPLICABLE REGULATIONS:

401 KAR 59:010 – *New Process Operations*, Particulate matter (PM/PM₁₀) and visible emissions standards apply to each affected facility associated with a process operation which is not subject to another emission standard with respect to particulates in Chapter 59 of 401 KAR commenced on or after July 2, 1975.

1. Operating Limitations:

None

2. Emission Limitations:

- a) Mass Emission Limit pursuant to 401 KAR 59:010 Section 3(2): Particulate matter emissions from the Powder Processing units (BM, CG1, FB, LB, M1, MM1, MM2, MP and SSE) shall be limited based on the following:

For process rates greater than 1,000 lbs/hr but less than 60,000 lbs/hr, the allowable emissions of particulate matter shall not exceed:

$$3.59 \times (\text{Tons Processed})^{0.62} \text{ lbs/hr, averaged over a three hour period.}$$

For processing rates of 1,000 lbs/hr or less, the allowable emission rate is 2.34 lbs/hr, averaged over a three hour period.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Following are the maximum allowable emission rates and the corresponding process rates for each emission unit:

Emission Unit BM:	7.09 lb/hr @ 6,000 lb/hr
Emission Unit CG1:	2.34 lb/hr @ 750 lb/hr
Emission Unit FB:	3.80 lb/hr @ 2,200 lb/hr
Emission Unit LB:	2.34 lb/hr @ 750 lb/hr
Emission Unit M1:	3.00 lb/hr @ 1,500 lb/hr
Emission Unit MM1:	2.68 lb/hr @ 1,250 lb/hr
Emission Unit MM2:	3.30 lb/hr @ 1,750 lb/hr
Emission Unit MP:	2.34 lb/hr @ 750 lb/hr
Emission Unit SSE:	2.34 lb/hr @ 1,000 lb/hr

- b) Opacity Limit pursuant to 401 KAR 59:010, Section 3(1)(a): Visible emissions from the Powder Processing units (BM, CG1, FB, LB, M1, MM1, MM2, MP and SSE) shall not equal or exceed 20% opacity on a 6-minute average basis.
- c) See **Section D.3, Source Emission Limitations** for hazardous air pollutant (HAP), particulate matter less than 10 microns (PM₁₀) and volatile organic compound (VOC) emission limitations.

Compliance Demonstration Method:

- a) For compliance with the particulate matter emission limitations, the permittee shall monitor the amounts and types of process weight added to each emissions unit. The process weight rate per unit shall be determined by dividing the tons of material added to each emission unit in a calendar quarter divided by total hours the unit operated that calendar quarter. Particulate matter emissions shall be calculated as follows:

$$PE = [PW \times PEF / OH] \times (1 - \text{control efficiency})$$

Where, PE = particulate emissions (lbs/hr), PW = process weight in tons during the quarter, PEF = particulate emission factor in lbs/ton of process weight, and OH = unit operating hours during that quarter.

Also see **3.a Testing Requirements**, **4. Specific Monitoring Requirements**, and **5. Specific Record Keeping Requirements**.

- b) For compliance with the opacity limits, refer to **4. Specific Monitoring Requirements**.
- c) See **Section D.3, Source Emission Limitations**, *Compliance Demonstration Method*.

3. Testing Requirements:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

If required by the Division, the permittee shall use EPA Reference Method 5 or Method 17 to determine particulate matter concentration being vented to atmosphere from the Powder Processing units (Unit BM, CG1, FB, LB, M1, MM1, MM2, MP and SSE) to demonstrate compliance with **2a. Emission Limitations**.

4. Specific Monitoring Requirements:

- a) The permittee shall perform a qualitative visual observation of the opacity of emissions from the Powder Processing units (Unit BM, CG1, FB, LB, M1, MM1, MM2, MP and SSE) at least once per operating month while the units are in operation, and maintain a log of the observations. If visible emissions from the vents are seen, then the opacity shall be determined by Reference Method 9. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs.
- b) The permittee shall perform dust collector inspections each calendar quarter for all dust collectors controlling particulate emissions from the Powder Processing units (Unit BM, CG1, FB, LB, M1, MM1, MM2, MP and SSE). Any defective bags shall be replaced.

5. Specific Recordkeeping Requirements:

The permittee shall maintain records of testing and monitoring results. Refer to 3. **Testing Requirements** and 4. **Specific Monitoring Requirements**.

6. Specific Reporting Requirements:

- a) The permittee shall report any exceedances or excursions from emission limitations or operating limitations.
- b) Refer to **Section F- Monitoring, Recordkeeping, and Reporting Requirements**.

7. Specific Control Equipment Operating Conditions:

None

8. Alternate Operating Scenarios:

None

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

Equip ID	Description	Capacity	Date Commenced	Applicable Regulation
T140	Fuel oil storage tank	500 gallons	1985	None
T143	Hot oil expansion tank	250 gallons	1985	None
--	Fuel oil storage tank (temporary)	< 1000 gallons	Not known	None
--	Hot oil expansion tank for TFE	60 gallons	2005	None
RD	Buffalo rotary vacuum dryer	40 cubic feet	1990	401 KAR 59:010
BF	Nutsche filter	6 ft. diameter	1992	401 KAR 59:010
P3	Pot 3 / out of service	1000 gallons	1985	None
T130	Propylene glycol tank	1900 gallons	1992	None
CH	Chiller	30 tons	2003	None
--	Liquid polymer product loadout (negligible volatile organic compound)	N/A	Not known	None
PR	Pilot reactor (R & D)	15 gallons	1992	None
LUWA	LUWA System (R & D with de minimis commercial sales)	--	1973	None
--	Laboratory facilities	N/A	Not known	None
--	Maintenance activities	N/A	Not known	None
	<u>Vent equalization system:</u>			
T115	Vent Surge tank	12,500 gallons	2003	None
T144	Vent Surge tank	1,500 gallons	1994	None
T149	Vent tank	15,000 gallons	2002	None
T150	Vent tank	500 gallons	2004	None
VP	Vacuum pumps (3), Stokes CD500	30 HP, 500 scfm	1991, 1995 & 2005	None
NLR	Liquid ring vacuum pump, Nash CL402	30 HP, 400 scfm	1999	None
	Note: Emissions passing through vent equalization system listed above are accounted for at the reaction system and storage tank emission units			

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Volatile Organic Compounds (VOC) and Hazardous Air Pollutant (HAP) emissions, as measured by methods referenced in 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein.

3. **Source Emission Limitations:**

- a. To preclude the applicability of 401 KAR 52:020, Title V permits, as defined in 401 KAR 52:001, Definitions, source-wide emissions shall not equal or exceed the following limits on any monthly rolling 12-month total basis:

- (1) Volatile organic compound (VOC) emissions: 90 tons per year; and
- (2) Particulate matter less than 10 microns (PM₁₀) emissions: 90 tons per year.

The permittee has also requested the following limits:

- (3) Total hazardous air pollutant (HAP) emissions: 22.5 tons per year; and
- (4) Single HAP emissions: 9 tons per year.

- b. Pursuant to 401 KAR 63:020, no owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Compliance Demonstration Method:

- a. Calculate and record annual source-wide emissions for each month of the previous 12-month period (i.e.: for the month January, the compliance demonstration shall be completed in February and shall include all data from February of the previous year to the last day of January). The monthly compliance demonstration shall include, at a minimum, the following:
 - (1) The monthly and consecutive 12-month production and throughput rates for each Reactor and storage tanks specified in paragraph (2) below.
 - (2) The monthly and consecutive 12-month VOC, PM₁₀, individual HAP, and combined HAP emission rates from the following operations:
 - (a) Reactor System # 2 Equipment (R2)
 - (b) Reactor System # 4 Equipment (R4)
 - (c) Reactor System # 6 Equipment (R6)
 - (d) Reactor System # 8 Equipment (R8)
 - (e) Reactor System # 11 Equipment (R11)
 - (f) Reactor System # 12 Equipment (R12)
 - (g) Reactor System # 16 Equipment (R16)
 - (h) Fugitive emissions (FUG)

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

- (i) Storage Tanks (DR, TB, TC, TK, TL, TM, TN, and TO)
- (3) The monthly and consecutive 12-month PM₁₀ emission rates from the powder processing operation.

Emission calculations from the Reactor system shall be based on material balance and appropriately summing the product of the weight percent of VOC and each HAP in the organic material emissions for each product. Fugitive emission calculations from the reactor system shall be based on U.S. EPA SOCMII average emission factors from the November 1995 Protocol for Equipment Leak Emission Estimates. Storage tanks emission calculations shall be based on most current TANKS program. Particulate matter emissions from the powder processing operation shall be based on the mass balance.

- b. Demonstration of compliance with the source-wide emission limitations in paragraph **3.a.** above, shall also serve as the demonstration of compliance with the air toxic limitation in paragraph **3.b.**, above. If units are modified, the Division may require modeling of toxic emissions.
- 4. **Source Recordkeeping Requirements:**
Actual PM₁₀, VOC and HAP emissions from each emission point shall be determined and recorded on a monthly basis in accordance with **Source Emission Limitations 3, Compliance Demonstration Method**. The permittee shall maintain records onsite such that they are readily accessible. These records shall indicate the production rate of each type of product and the permittee shall provide these records to Division personnel upon request.
 - 5. **Source Reporting Requirements:**
The permittee shall report to the Division in accordance with **Section F** the amount of production through each Reactor System and VOC and HAP emissions from each Reactor System Equipment.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)(1) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place (as defined in this permit), and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality[401 KAR 52:030 Section 3(1)(f)1a and Section 1a (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. In accordance with the requirements of 401 KAR 52:030 Section 3(1)f the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:030 Section 22. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Other deviations from permit requirements shall be included in the semiannual report required by Section F.5 [Section 1b V(3) and (4) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Pursuant to 401KAR 52:030, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit in accordance with the following requirements:
 - a. Identification of each term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.
 - f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

Division for Air Quality
Paducah Regional Office
130 Eagle Nest Drive
Paducah, KY 42003-9435

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401KAR 52:030, Section 3(1)(d), the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee. If a KYEIS emission survey is not mailed to the permittee, then the permittee shall comply with all other emission reporting requirements in this permit.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.
12. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
 - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - i. The size and location of both the original and replacement units; and
 - ii. Any resulting change in emissions;
 - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - i. Re-install the original unit and remove or dismantle the replacement unit; or
 - ii. Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS**(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030 Section 3(1)(b) and is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to the termination, revocation and reissuance, revision, or denial of a permit [Section 1a (2) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a (5) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030 Section 18. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:030 Section 12;
 - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.
5. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a (6) and (7) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].

SECTION G - GENERAL PROVISIONS (CONTINUED)

6. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030 Section 7(1)].
7. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a (11) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
8. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a (3) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
9. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens of the United States [Section 1a (12)(b) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
10. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038 Section 3(6) [Section 1a (9) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
11. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:030 Section 11(3)].
12. This permit does not convey property rights or exclusive privileges [Section 1a (8) of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 Section 10].
13. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.
15. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

SECTION G - GENERAL PROVISIONS (CONTINUED)

16. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
17. Permit Shield – A permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - a. Applicable requirements that are included and specifically identified in this permit; and
 - b. Non-applicable requirements expressly identified in this permit.
18. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030 Section 3(1)(c)].
19. The authority to operate granted through this permit shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:030 Section 8(2)].

(b) Permit Expiration and Reapplication Requirements

This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:030 Section 12].

(c) Permit Revisions

1. Minor permit revision procedures specified in 401 KAR 52:030 Section 14 (3) may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:030 Section 14 (2).
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)

(d) Construction, Start-Up, and Initial Compliance Demonstration Requirements

1. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
2. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - a. The date when construction commenced.
 - b. The date of start-up of the affected facilities listed in this permit.
 - c. The date when the maximum production rate specified in the permit application was achieved.
3. Pursuant to 401 KAR 52:030, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
4. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the final permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
5. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration test on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. These performance tests must also be conducted in accordance with General Provisions G(d)7,8 this permit and the permittee must furnish to the Division for Air Quality's Frankfort Central Office a written report of the results of such performance test
6. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)

7. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
8. Pursuant to 401 KAR 50:045 Section 5 in order to demonstrate that a source is capable of complying with a standard at all times, a performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirement on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

(e) Acid Rain Program Requirements

If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

(f) Emergency Provisions

1. Pursuant to 401 KAR 52:030 Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
 - a. An emergency occurred and the permittee can identify the cause of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
 - d. The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
2. Notification of the Division does not relieve the source of any other local, state or federal notification requirements.

SECTION G - GENERAL PROVISIONS (CONTINUED)

3. Emergency conditions listed in General Provision G(f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030 Section 23(3)].
4. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030 Section 23(2)].

(g) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

2. If requested, submit additional relevant information to the Division or the U.S. EPA.

(h) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
 - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None